

ACCESSION NR: AT4013987

Fig. 1 in the Enclosure) which can be used to reduce all angles of twist to a uniform specimen height and to determine the conductance of a given material with the aid of a simple formula:

$$\sigma' = K \frac{\Delta \varphi l}{i_{\text{mean}}}$$

where K is the instrument constant determined from the angle of twist of a uniform height standard, i_{mean} is the average current intensity in stator components in amps., $\Delta \varphi$, is the angle of twist reduced to uniform specimen height, in radians. Temperature was shown to have little effect on the value of K. Orig. art. has: 1 table, 2 formulas, 2 graphs.

ASSOCIATION: MOSKOVSKIY INSTITUT STALI I SPLAVOV (Moscow Steel and Alloy Institute)

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 01

SUB CODE: ML, SD

NO REF Sov: 003

OTHER: 001

Card 2/32

S/031/62/000/012/001/002
B142/B186

AUTHORS: Voleynik, V. V., Kunayev, A. M., Candidate of Technical Sciences

TITLE: The equilibrium potentials of vanadium in chloride melts

PERIODICAL: Akademiya nauk Kazakhskoy SSR. Vestnik, no. 12 (213), 1962, 28-33

TEXT: For the electrolytic purification of raw vanadium it is important to know its equilibrium potentials in order to determine optimum processing conditions. The investigations were carried out in a eutectic melt of LiCl and KCl. A V-electrode (highly purified vanadium) was dipped as anode in this melt to form VCl_2 . To prevent oxidation of the vanadium, the space over the melt was evacuated to 1-2 mm Hg and filled with argon (at 3-5 mm Hg excess pressure) after the gases dissolved in the melt had escaped. The equilibrium potentials were measured with respect to a lead reference electrode containing LiCl and KCl with a 8.05% $PbCl_2$ solution. The results were converted for a chlorine electrode.

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The equilibrium potentials ...

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The exact V concentrations were determined by weighing the V-electrode after the experiment. They were 1.19, 3.48, 9.1, and 11.2% by weight of VCl_2 . The temperature range was $570-810^{\circ}C$. Isotherms which formed straight lines with a slope of $2.3 \frac{RT}{2F}$ showed that bivalent V ions existed in the melt. Results: (1) Change of free energy for the formation of VCl_2 liqu from the elements as a function of temperature:

$\Delta F_1^{\circ} = 101100 + 25.3 T$ cal/mole; (2) heat of fusion 8.8 cal/mole; (3) change of entropy in melting VCl_2 5.4 cal/mole; (4) temperature of the VCl_2 melt $1400^{\circ}C$ ($1350^{\circ}C$ found by P. Ehrlich and H. I. Seifert, Z. anorgan. und allgem. Chem. 1953, 301, nos. 5-6, 282-287). Diffusion potentials were neglected in the calculations, since the salts determining the potentials (VCl_2 and $PbCl_2$) were strongly diluted by electrochemically indifferent salts. There are 3 figures. The English-language reference is: D. H. Ir. Baker, and I. D. I. Ramsdell, Electrochim. Soc., v. 108, 12, 1960, 985.

Card 2/2

LOPATKINA, G.A.; BOGACHOV, G.N.; VOLEYKO, N.S.

Effect of the intensity of mixing on the dimensions of crystals formed during decomposition of sodium fluorosilicate by sodium carbonate solutions. Zhur.prikl.khim. 35 no.10:2180-2184 O '62.
(MIRA 15:12)

(Sodium fluosilicate)(Sodium carbonate)(Crystals)

35224
S/148/62/000/001/009/015
E073/E535

18.17.85

AUTHORS: Voleynik, V.V., Yelyutin, V.P., Lysov, B.S. and Maurakh, M.A.

TITLE: Electric conductivity of solid and liquid titanium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no.1, 1962, 137-140

TEXT: Although data on the electric conductivity of titanium up to temperatures of 1300°C have been published, similar data relating to near-fusion temperature and to the liquid state have not been published. An electrodeless method was applied for measuring the resistivity of titanium. This is based on measuring the stationary torsion angle of a specimen suspended on an elastic thread in a rotating magnetic field. The stator coil winding of the measuring instrument was provided with a high temperature insulation and the coils were placed inside a water-cooled steel housing. Graphite heater elements were used which permitted obtaining temperatures up to 2500°C. The method of measurement of the resistivity is similar to that applied by other authors for measuring the resistivity of molten metals. The temperature

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X

Electric conductivity of solid ... S/148/62/000/001/009/015
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dependence of the resistivity of titanium ρ , mohm·cm is plotted in a graph. Curve 1 represents the values obtained by the author of this paper, curves 2 and 3 are published values. For the liquid metal two values were obtained: A - for melts produced in ThO_2 or BeO crucibles, B - for melts produced in graphite crucibles. The author points out that the data for liquid titanium at 1800°C (points A and B) are not entirely reliable and should be verified with a crucible material less active towards liquid titanium than the graphite, thorium dioxide, and beryllium oxide used in these experiments. From the test results the temperature coefficients of α - and β -titanium were determined. The specific resistance of α -titanium in the temperature range 20 to 450°C can be expressed by

$$\rho_\alpha = 61.5 [1 + 2.48 \cdot 10^{-3} (t - 20)]$$

and for β -titanium, in the temperature range 880 to 1700°C , can be expressed by

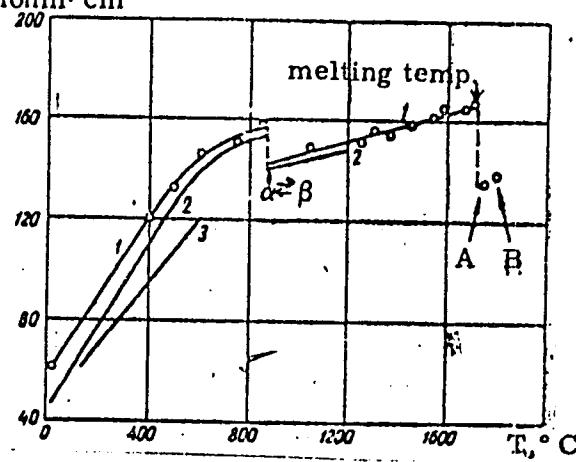
$$\rho_\beta = 143 [1 + 2.13 \cdot 10^{-4} (t - 880)]$$

There are 1 figure and 11 references: 5 Soviet-bloc and 6 non-Soviet-bloc. The four latest English-language references read as follows: Ref.2: McQuillan A.D. J. Inst. Met., 78, 249, 1950-51; Card 2/3 X

Electric conductivity of solid ... S/148/62/000/001/009/015
E073/E535

Ref. 5: I.L.Wyrtt. Trans.Amer.Inst.min.(metal) Engrs.197, 903, 1953;
Ref. 4: W.C.Michels, S.Wilford. Phys.Rev. 76, 174, 1949; Ref. 10:
B.Weber, M.Thompson. J.Amer.Ceram.Soc. 40(11), 363, 1957.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)
SUBMITTED: April 6, 1961 ρ , mohm·cm



Figure

Card 3/3

KUNAYEV, A.M.; VOLEYNIK, V.V.

Prospects for obtaining vanadium and its alloys from
Kazakhstan ores. Trudy Inst. met. i obog. AN Kazakh.
SSR 5:3-11 '62. (MIRA 15:11)
(Kazakhstan--Minerals)
(Vanadium)

VOLEYNIK, V.V.; YAKYUTIN, V.P.; LYSOV, B.S.; MAURAKH, M.A.

Electrical conductivity of solid and liquid titanium. Izv.
vys. uchab. zav.; chern met. 5 no.1:137-140 '62,
(MIRA 15:2)

1. Moskovskiy institut stali.
(Titanium—Electric properties)

VOLF, A.

MALEK, I.; VOSYKOVA, L.; VOLF, A. "Fission of Bacteria." p. 12.
(Chekhoslovatskaia Biologija. Vol. 2, No. 1, Apr. 1953. Praha.)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 6, June 1953, Unclassified.

VOLF, A.

MALEK, I.; VOSYKOVA, L.; VOLF, A. "Stability of Bacteria Cultured in a Flowing Medium." p. 68. (Chekoslovatskaia Biologija. Vol. 2, no. 2, Apr. 1953. Praha).

East European Vol. 3, No. 6
SO: Monthly List of Russian Accessions, Library of Congress, June 1953, uncl. 4

MALEK, Ivan, akademik; VOSYKOVA, L., tekhnicheskiy sotrudnik;
VOL'F, A., tekhnicheskiy sotrudnik.

Stability of bacteria cultured in a flowing medium. Chekh.biol.
2 no.2:68-77 Ap '53. (MIRA 7:2)

1. Institut biologii ChSAN, mikrobiologiya, Praha.
(Bacteria) (Bacteriology--Cultures and culture media)

MALEK, I; VYSOKOVA, L., tekhnicheskiy sotrudnik; VOL'F, A., tekhnicheskiy
sotrudnik.

Fission of bacteria. Chekh.biol. 2 no.1:12-17 Ap '53. (MLRA 7:2)

1. Biologicheskiy institut ChSAN, mikrobiologiya, Praha.
(Bacteria)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001860420018-1"

KABANOV, V.N., kand. tekhn. nauk (Sverdlovsk); VOL'F, A.M., inzh.
(Sverdlovsk); KUIMOV, V.I., inzh. (Sverdlovsk)

New textbook on electric traction. Zhel. dor. transp. 45 no.11:
(MIRA 16:12)
94-95 N '63.

VOL'F, A.M., kand.tekhn.nauk

Conditions of the work of electric locomotives in case of the over-heating of traction motors with decreased excitation. Vest.TSMII
(MIRA 17:3)
MPS 23 no.2:11-14 '64.

VAYNSHTEYN, B.Z. (Tbilisi); VOL'F, A.M., kand. tekhn. nauk

Experimental study of the heating and cooling of the traction
motors of main line electric locomotives. Elektricheskie
no.10:85-86 O '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodo-
rozhnogo transporta, Ural'skoye otdeleniye (for Vol'f).

VOL'F, A.M., starshiy nauchnyy sotrudnik; KLEYNERMAN, M.I. (Sverdlovsk)

Accounting and establishing of norms for electric power consumption are an important prerequisite for its efficient utilization. Zhel.dor.transp. 42 no.1:41-43 Ja '60.
(MIRA 13:5)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta (for Vol'f).
2. Nachal'nik tekhnicheskogo otdela sluzhby elektrifikatsii Sverdlovskoy dorogi (for Kleynerman).
(Electric railroads)

VOL'F, A.M., nauchnyy sotrudnik

Does increasing the length of locomotive runs affect the
heating up of electric locomotive motor windings? Elek. i
tepl. tiaga 3 no.4:27-29 Ap '59. (MIRA 12:7)

1.Ural'skoye otdeleniye Tsentral'nogo nauchno-issledovatel'skogo
instituta Ministerstva putey soobshcheniya, Sverdlovsk.
(Electric railway motors)

SOV/112-58-2-2325

Translation from: Referativnyy zhurnal, Elektrotehnika, 1958, Nr 2, p 87 (USSR)

AUTHOR: Vol'f, A. M.

TITLE: Ways to Save Electric Energy (Puti ekonomii elektroenergii)

PERIODICAL: Elektr. i teplovozn. tyaga, 1957, Nr 2, pp 22-24

ABSTRACT: During the last few years, Sverdlovsk railroad personnel have achieved a certain success in reducing the per-unit consumption of electric energy. In accelerating VL-22^m, an electric locomotive energy saving is effected largely by reducing losses in the starting resistor. Calculations show that the greatest saving can be obtained in accelerating heavy-weight trains upgrade. Use of the maximum currents possible during acceleration is recommended. Lightweight train run and acceleration on a downgrade should be conducted mostly on the running positions of series-connected and series-parallel-connected traction motors with a weakened field. These measures permit saving 3-8 kwh-ton during one acceleration period, depending on the train weight and on the angle of downgrade. In running on flat terrain, the main source of savings is the accumulation of kinetic energy on downgrades and its

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SOY/112-58-2-2325

Ways to Save Electric Energy

utilization on flat sections and upgrades. The saving in the per-unit energy consumption on downgrades can be calculated from this formula:
 $\alpha = 0.0121 (v_2^2 - v_1^2)$, where v_2 is the actual speed in km/hour at the end of the downgrade section, v_1 is the speed at the beginning of the downgrade in km/hour, and the efficiency can be assumed to be equal to 0.885; losses in the supply power system are not taken into consideration. The correct pattern of driving heavyweight trains is very important. The energy saving on a heavy train can be determined from this formula: $A = PQa_3 \ell / 1000Q_H$, where A is the saving in km/h, P is the locomotive weight in tons, Q is the train overweight as compared to its normal weight in tons, Q_H is the normal weight in tons, a_3 is the energy consumption per unit, and ℓ is line section length in km. The saving can be calculated for any number of trains or for the entire depot. The same formula can serve for determining the overconsumption of energy in the case of driving partially-loaded trains. Experience has shown that regenerative braking can be used reliably in the speed range from the maximum speed down to 70 km/h, and for 250 amp and more in the traction motor in the range

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Ways to Save Electric Energy

down to 50-55 km/h. The use of regenerative braking permitted the workers of the Goroiblagdatskaya - Chusovaya - Kizel line to return 7,203,000 kWh to the power system in 1956, in addition to the regenerated energy used by other locomotives that worked under traction conditions. With a double-traction run on easy sections of the railroad, the locomotives are underloaded; hence, the traction motors of the second locomotive should be switched off on such sections. To secure such a possibility, the workers of the second Perm' depot have made an alteration in the control circuit of the VL-22^m electric locomotive. To record the switching-on of the second locomotive, a special relay has been installed in the top lead of the speedometer. A train's timetable has a great influence on its electric-energy consumption. Many points about normalizing electric-energy consumption are not clear, and the current technical norms need serious corrections.

T.A.K.

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VOL'F, A.M., inzh.; RUDAKOV, B.V., inzh.

Stability characteristics of the VL22^m electric locomotive.
Vest. TSMII MPS 17 no.6:49-51 S '58. (MIRA 11:11)

1. Ural'skoye otdeleniye Vsesoyuznogo tsentral'nogo nauchno-
issledovatel'skogo instituta Ministerstva putey soobshcheniya.
(Electric locomotives--Testing) (Stability of locomotives)

VOLF A.M. inzhener.

Ways to economize on electric energy; experience of the Sverdlovsk railroad. Elek. i tepl. tiaga no.2:22-24 F '57. (MLRA 10:5)
(Sverdlovsk--Electric railroads)

VOL'F, A.M., inzhener (Sverdlovsk)

Eliminate contradictions in designating locomotive capacity.
Elek. i tepl. tsiaga no. 5:27 My '57. (MLRA 10:7)
(Locomotives)

VOL'F, A.M., inzh.

Effect of ventilation intensity on the heating of the electric locomotive traction motor. Vest. TSNII MPS 20 no.7:59-62 '61.
(MIRA 14:12)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zhelezodorozhnogo transporta, Ministerstva putey soobshcheniya, Sverdlovsk.
(Electric railway motors—Cooling)

VOL'F, A.M., inzh.

Effect of voltage deflection in the overhead network on the heating of the armature coils of the motor of a d.c. electric locomotive. Trudy TSNII MPS no. 246:119-154 '62. (MIRA 16:2)

(Electric locomotives—Testing)
(Electric railroads—Current supply)

VOL'F, A. S.

42746. VOL'F, A. S. i ANIKIN, M. M. Sovremenyye Voprosy Lechebnoy I Sotsial'noy Pomoshchi Invalidam Otechestvennoy Voyny s travmatischeeskimi Poraženiyami Nervnoy sistemy. V SB: Med.-San. Posledstviya Voyny i Meropriyatiya Po Ikh Likvidatsii. T. I. M., 1948, s. 110-18.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

1. VOL'F, A. S.
2. USSR 600
4. Psychiatrists
7. Life and creative activity of V. M. Bekhterev, Sov. med, 16, No. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VOLF, A.S.

A. VOLF

"The life and creative activity of V. M. Bekhterev" Tr. from the Russian p.108
(ANALELE ROMANO-SOVIETICE. SERIA MEDICINA GENERALA Vol. 6, No. 3, May/ June
1953 Bucuresti, Rumania)

SO: East Empresario, LC, Vol. 2, No. 12, Dec. 1953

WOLF, B.

Coefficient of thermic expansibility and technical glass. II. p. 90.
SKLAR A KERAMIK, Praha, Vol. 5, no. 4, Apr. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

WOLF, B.

Coefficient of thermic expansibility and technical glass. I. (To be contd.)
p. 68.
SKLAR A KERAMIK, Praha, Vol. 5, no. 3, Mar. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

VOLF, B.

Coefficient of thermic expansibility and technical glass. III. p. 114.
SKLAR A KERAMIK, Praha, Vol. 5, no. 5, May 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

TABOLIN, V.A.; VOL'F, B.S.; MATSULEVA, N.N.; GENKINA, E.M.; ORLOVA,
L.M.; PETRUN'KINA, Z.A.

Features of the course of erythroblastosis fetalis in newborn
infants. Sov. med. 24 no. 7:50-56 Jl '60. (MIRA 13:8)

1. Iz kafedry pediatrii (zav. - prof. G.N. Speranskiy) TSentral'-
nogo instituta msovershenstvovaniya vrachey i rodil'nogo doma
No. 12 (glavnnyy vrach M.M. Repina), Moskva.
(ERYTHROBLASTOSIS FETAL)

"APPROVED FOR RELEASE: 03/14/2001

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~~SECRET~~
VOL'F, E. SHCHUKAREV, S.A.; VOL'F, E.; MOROZOVA, N.P.

Enthalpy of lithium stibide formation. Zhur.ob.khim. 24 no.11:
1925-1926 N 154. (MIRA 8:3)

1. Leningradskiy gosudarstvennyy universitet.
(Lithium stibide) (Enthalpy)

"APPROVED FOR RELEASE: 03/14/2001

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4. Secondary or compounds with a variable composition

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CIA-RDP86-00513R001860420018-1"

Chemistry of organometallic compounds
with variable composition

of CoTet (Co_2Tet_2). Within the limits of homogeneity
 ΔH_f is a linear function of compn. J. Rovtar, Lewis

79-2-3/58

AUTHORS: Ariya, S. M.; Morozova, M. P.; Khuan Tszi-Tao; Vol'f, E.

TITLE: The Enthalpy of Formation of Lithium, Magnesium and Zinc Arsenides
(Ental'piya obrazovaniya arsenidov litiya, magniya i tsinka)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 2, pp. 293-295 (U.S.S.R.)

ABSTRACT: The formation enthalpies of lithium, magnesium and zinc arsenides were experimentally established at -81.3 ± 2 , -96 ± 3 and -30.5 ± 3 kcal/g respectively. Numerous facts are cited indicating that the formation enthalpy value of arsine is in agreement with the data on the thermal stability of arsenides. Li_3As appears to be a somewhat more exothermal compound than Li_3Sb which is in conformity with the fact of displacing the Sb by As from the combination with Li.

Card 1/2 There are 7 references, of which 4 are Slavic.

79-2-3/58

The Enthalpy of Formation of Lithium, Magnesium and Zinc Arsenides

ASSOCIATION: The Leningrad State University

PRESENTED BY:

SUBMITTED: March 24, 1956

AVAILABLE: Library of Congress
Card 2/2

SOV/54-59-1-10/25

5(2)

AUTHORS: Morozova, M. P., Vol'f, E., Balova, T. P.

TITLE: The Chemistry of Compounds of Variable Composition (Khim. ya
soyedineniy peremennogo sostava). VIII. Volume Relations
Within the System Titanium - Oxygen (VIII. Ob'yemnyye soot-
nosheniya v sisteme titan-kislorod)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimi
1959, Nr 1, pp 78-83 (USSR)

ABSTRACT: In previous papers the authors stated that the formation enthalpy of substances located within the homogeneous range of salt-like compounds with variable composition virtually does not differ from the formation enthalpy of mixtures of corresponding stoichiometric compounds. These salt-like compounds of variable composition are therefore assumed to be submicro-inhomogeneous systems. The lattice of one compound includes small lattice ranges of another stoichiometric compound. In this paper the authors ascertained the course of the values of the grammformula volumes of the system titanium - oxygen for the purpose of determining how far the volume relations of this system agree with the assumptions concerning the chemical structure of salt-like compounds with variable

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SOV/54-59-1-10/25

The Chemistry of Compounds of Variable Composition. VIII. Volume Relations
Within the System Titanium - Oxygen

composition. The grammformula volume was determined on the basis of pycnometric measurements of the density. The results are listed in a table. From the dependence of the grammformula volume on the composition of oxides the following conclusions were drawn: the grammformula volumes of substances which are contained in that portion of the homogeneous range of titanium oxide ($TiO_{1.00} - TiO_{1.22}$) which is enriched with oxygen virtually do not differ from the volume of a mixture of $TiO_{1.00}$ and $TiO_{1.50}$ of the same gross composition. The same holds for the grammformula volumes of substances which are contained within the homogeneous ranges of titanium oxide poor in oxygen, which do not differ from mixtures of equal gross composition. This fact corresponds to the model assumed for the chemical structure of salt-like compounds with variable composition. Further, the authors stated full agreement between the energy- and volume diagram of the system titanium - oxygen. There are 1 figure,

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The Chemistry of Compounds of Variable Composition. VIII. Volume Relations
Within the System Titanium - Oxygen

1 table, and 10 references, 8 of which are Soviet.

SUBMITTED: June 10, 1958

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5 (4)

AUTHORS: Vol'f, E., Tolkachev, S. S.,
Kozhina, I. I. SOV/54-59-2-13/24

TITLE: X-Ray Investigation of Titanium (II)- and Vanadium (II) Oxides
(Rentgenograficheskoye issledovaniye zakisey titana i vanadiya)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii,
1959, Nr 2, pp 87-92 (USSR)

ABSTRACT: The lower oxides TiO and V_2O_3 to be investigated were obtained by vacuum coagulation from powdery hydrated titanium + TiO_2 at 1300° , and from hydrated vanadium + V_2O_5 at 1600° . The V_2O_5 used was of the KhCh type. The analysis of the preparations was carried out by determining the increase in weight at the oxidation to TiO_2 and V_2O_5 , respectively. For the qualitative evaluation of the extension of the homogeneous ranges as a preliminary investigation, powder diagrams were prepared by means of RPK-2 cameras. The samples were turned during photographing. The diagrams are shown in figures 1 and 2. The diagram of the vanadium (II) oxides shows that the vanadium (II)

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X-Ray Investigation of Titanium (II)- and
Vanadium (II) Oxides

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oxide has a wide homogeneous range, and that only at $\text{VO}_{1.32}$ new lines appear which belong to the V_2O_3 . There are no intermediate phases between vanadium (II) oxide and V_2O_3 . The lower limit of the vanadium (II) oxide as a homogeneous phase could be determined at $\text{VO}_{0.80}$ (upper limit at $\text{VO}_{1.28}$). In the titanium-oxygen system, $\text{TiO}_{0.40} - \text{TiO}_{0.60}$ proved to be an independent phase, in the range $\text{TiO}_{0.83-90}$ two phases existed (TiO and $\text{TiO}_{0.48}$). The upper limit of the homogeneous range of the titanium (II) oxide was determined at $\text{TiO}_{1.20}$ (lower limit at $\text{TiO}_{0.89}$). The lattice parameters were determined by precision roentgenograms by means of the same camera RPK-2, taken according to the asymmetric method by Straumanis. The values of these parameters depending on the composition and production temperature of the preparations are compiled in table 1 (for the vanadium (II) oxides) and table 2 (for

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X-Ray Investigation of Titanium (II)- and
Vanadium (II) Oxides

SOV/54-59-2-13/24

the titanium (II) oxides) (also in figures 3, 4). The figures clearly show that the lattice parameter of the vanadium (II) oxide increases with increasing oxygen content, whereas the parameter of the titanium (II) oxide decreases with increasing oxygen content. The value of the lattice parameter found for $VO_{1.0}$ (4.069 Å) corresponds to the values found by Mathewson (Ref 8) and Rostoker (Ref 10), for titanium (II) oxide it lies near the value found by Anderson (Ref 3) (4.182 Å). There are 4 figures, 2 tables, and 10 references, 4 of which are Soviet.

SUBMITTED: July 1, 1958

Card 3/3

VOL'F, E., Cand Chem Sci -- (diss) "Thermodynamic and roentgenographic study of compounds of variable composition in the system Ti-O and V-O." Len, 1958. 14 pp (Len Order of Lenin State Univ im A. A. Zhdanov), 150 copies (KL, 35-58, 105)

VOL'F, E.; TOLKACHEV, S.S.; KOZHINA, I.I.

Roentgenographic investigation of titanium and vanadium oxides. Vest.
LGU 14 no.10:87-92 '59. (MIRA 12:6)
(Titanium oxides) (Vanadium oxides)

VOL'F, E.

Development and regulation of extremities in birds. Izv.AU
SSSR.Ser.biol. no.3:335-343 My-Je '59. (MIR 12:9)

1. Kollezh de Frans, Laboratoriya eksperimental'noy embriologii,
Nozhan-na-Marne.
(EXTREMITIES (ANATOMY)) (EMBRYOLOGY--BIRDS)

5 (2)

AUTHORS: Vol'f, E., Ariya, S. M.

SOV/79-29-8-3/81

TITLE: Enthalpy of Formation of Vanadium Oxides

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2470 - 2473
(USSR)

ABSTRACT: The vanadium oxides necessary for the investigation were prepared in a special furnace at $1,600^{\circ}$ by fusing the mixtures of the pulverized, hydrogenized vanadium and vanadium oxide which had been pressed into tablets. The analysis of the preparations obtained was made by determination of the weight gained in their oxidation to V_2O_5 . The radiographic investigation of the pre-

parations showed that under these conditions the range of homogeneity of the vanadium suboxide lies within the interval $VO_{0,86} - VO_{1,27}$. The heats of combustion of vanadium oxide were determined calorimetrically using small quantities (0.1-0.2 g) and an oxygen pressure of 42 atm. The gross composition of the combustion product was determined by the weight gained in oxidation. Results obtained in the determination of the heats of combustion (Q,p) of vanadium oxide and of metallic vanadium (with corrections) and the heats of formation of the various

Card 1/2

Enthalpy of Formation of Vanadium Oxides

SOV/79-29-8-3/81

compositions computed from them are shown in table 1. The heats of formation hitherto determined of the vanadium oxides VO_4 , V_2O_3 , VO_2 , and V_2O_5 differ considerably from each other. In table 2 the data obtained by the authors are compared with those given in publications. They correspond well to those by H. Siemonsen and to those suggested by the American Bureau of Standards if the sources of errorz are taken into consideration. Thus, it was ascertained that the heat of formation of vanadium suboxide changes steadily with the composition, as is the case with titanium suboxide. This regularity is not in contradiction to the concept of the inhomogeneous submicroscopic structure of the lattice of some oxides of variable composition. There are 1 figure, 2 tables, and 9 references, 7 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: July 11, 1958

Card 2/2

2(2)
AUTHORS:

TITLE:

PERIODICAL:

ABSTRACT:

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1

Vol. 1, E., Korozova, M. P.
Proportions by Volume Ratios in the System Vanadium - Oxides.

Zhurnal obshchey khimii, 1959, Vol 29, Jr 9,
pp 3146 - 3148 (USSR)

Investigation of proportions by volume in binary systems is of great interest since it often furnishes sufficient information on the limits of homogeneous ranges and also increases the knowledge of the actual nature of solid phases in vanadium powder by annealing compressed mixtures of vanadium oxides necessary for the preparation of vanadium oxide (V₂O₃) is an electric furnace at 1600°C with vanadium oxide was produced for a period of 3-4 hours. The vanadium used contained 0.05% reducing agent (cobalt; the vanadium oxide was produced by reducing vanadium pentoxide with hydrogen at 900°C. The decrease in weight of the preparations was checked according to the Voss method up to V2O₅. The density was determined by a formerly found method (Ref 7). The densities were plotted in a table, and their course in the figure. The densities of the vanadium oxides according to the figures are listed in a table, and their course in the figure.

Card 1/2

Proportions by Volume Ratios in the System
Vanadium - Oxygen

SOV/79-29-9-73/76

Therefore the vanadium- and titanium monoxide, according to the terminology of N. S. Kurnakov's school, are no berthollides (as usually assumed) but daltonides, if the form of dependence of the gram-formula-volumes and enthalpies of formation on the composition is taken into account. A distinct change in volume is visible in the formation of substances of the following composition: $VO_{1.00}$ - $VO_{1.27}$ from $VO_{1.00}$ and $VO_{1.50}$. The course of gram-formula-volumes leads to $VO_{1.25}$ - $VO_{1.28}$ as upper limit of the homogeneous range of vanadium oxide. A singular point on the curve composition-versus-gram-formula-volume corresponds to the composition $VO_{1.67}$, which agrees with the radiographic data on the existence of a compound of this composition. There are 1 figure, 1 table, and 8 references, 5 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)
SUBMITTED: July 11, 1958
Card 2/2

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1

VOL'F, E.L.

Motherhood defamed; pages from an Italian journal. Zdorov'e 4
no.5:32 My '58.
(ITALY--CHILDBIRTH) (MIRA 11:4)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1"

VOLF, E.L.

Gift to humanity. Zdorov'e 2 no.5:26-27 My '56.
(CHILDBIRTH-PSYCHOLOGY)

(MLB 9:8)

PAUKRTOVA, Ludmila; VOLF, Frantisek

Increasing efforts of trade unions to improve the labor productivity and management of wage funds. Prace mzda 10 no.9:419-421 S '62.

1. Ustredni rada odboru.

VITELT

L 42064-65	EWT(m)/EWG(m)	RWH/RM
ACCESSION NR: AP5010918		UR/0286/65/000/007/0103/0103
AUTHORS: <u>Bakhmann, R.</u> ; <u>Kraus, U.</u> ; <u>Royer, Kh.</u> ; <u>Shvakchula, G.</u> ; <u>Varncke, D.</u> ; ¹⁴ <u>Velond, V.</u> ; <u>Vol'f, F.</u> ^B		
TITLE: A method for obtaining sulfocationites. Class 39, No. 169786, ¹⁵		
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 103		
TOPIC TAGS: sulfocationite, polymer, monomer, sulfonation, vinyl, epoxy, initiator, organic solvent		
ABSTRACT: This Author Certificate presents a method for obtaining sulfocationites by sulfonating a copolymer of one or several monovinyl aromatic compounds with one or several bonding agents containing vinyl or epoxy groups. The copolymerization is conducted in the presence of initiators in the medium of an organic solvent. To obtain mechanically strong sorbents, the organic solvent is added during polymerization in the amount of 0.25-5% by weight of the monomers.		
ASSOCIATION:	none	
SUBMITTED:	01Nov63	
NO REC SOV:	000	
Card 171	ENCL: 00	SUB CODE: 00, 00
	OTHER: 000	

VOLF, F.

Decaying of young salmonoid fish caused by oversaturation of water with gases.", p. 89, (SEOPNIK, Vol. 26, #1/2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Acquisitions, Vol. 2, #8, Library of Congress, August 1953, Uncl.

VOLF, F.

"The Most Important Fish Diseases in Our Pond Economy and Protective Measure to be Used Against Them." p. 1156 (ZA SOCIALISTICKE ZEMEDELSTVI, Vol. 3, No. 10, Oct. 1953)
Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,
April 1954. Unclassified.

VOLF, F.

"Trout wounded by electric current during the fishing process.", p. 109,
(SBORNÍK, Vol. 26, #1/2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of
Congress, August 1953, Uncl.

VOLF, Frantisek

Tasks of the Revolutionary Trade Union Movement in remuneration of workers. Prace mzda 11 no.9:436-439 S'63.

VOLF, Frantisek

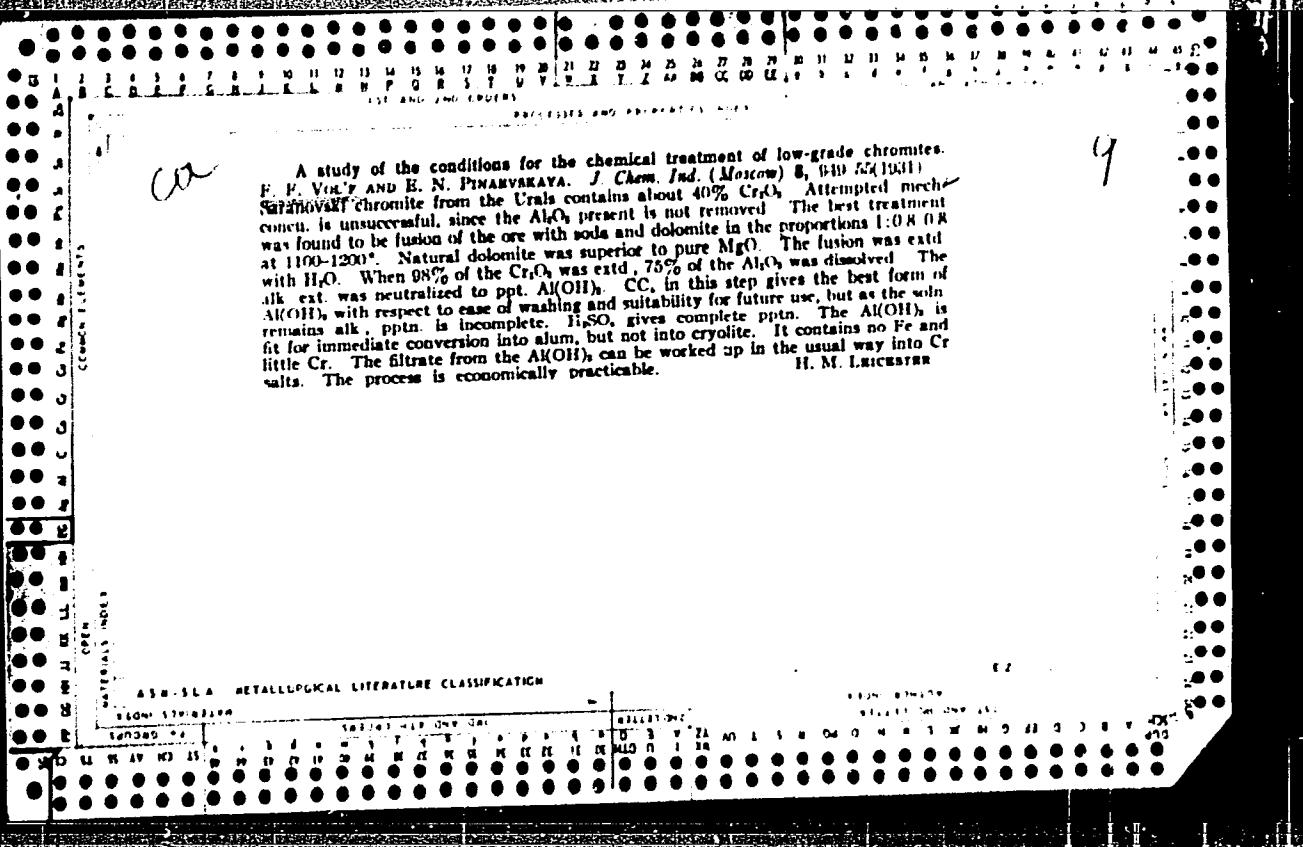
New tasks in the wage control in 1964. Prace mzda 12 no.3
100-104 Mr'64

1. Central Council of Trade Unions.

VOLF, Frantisek

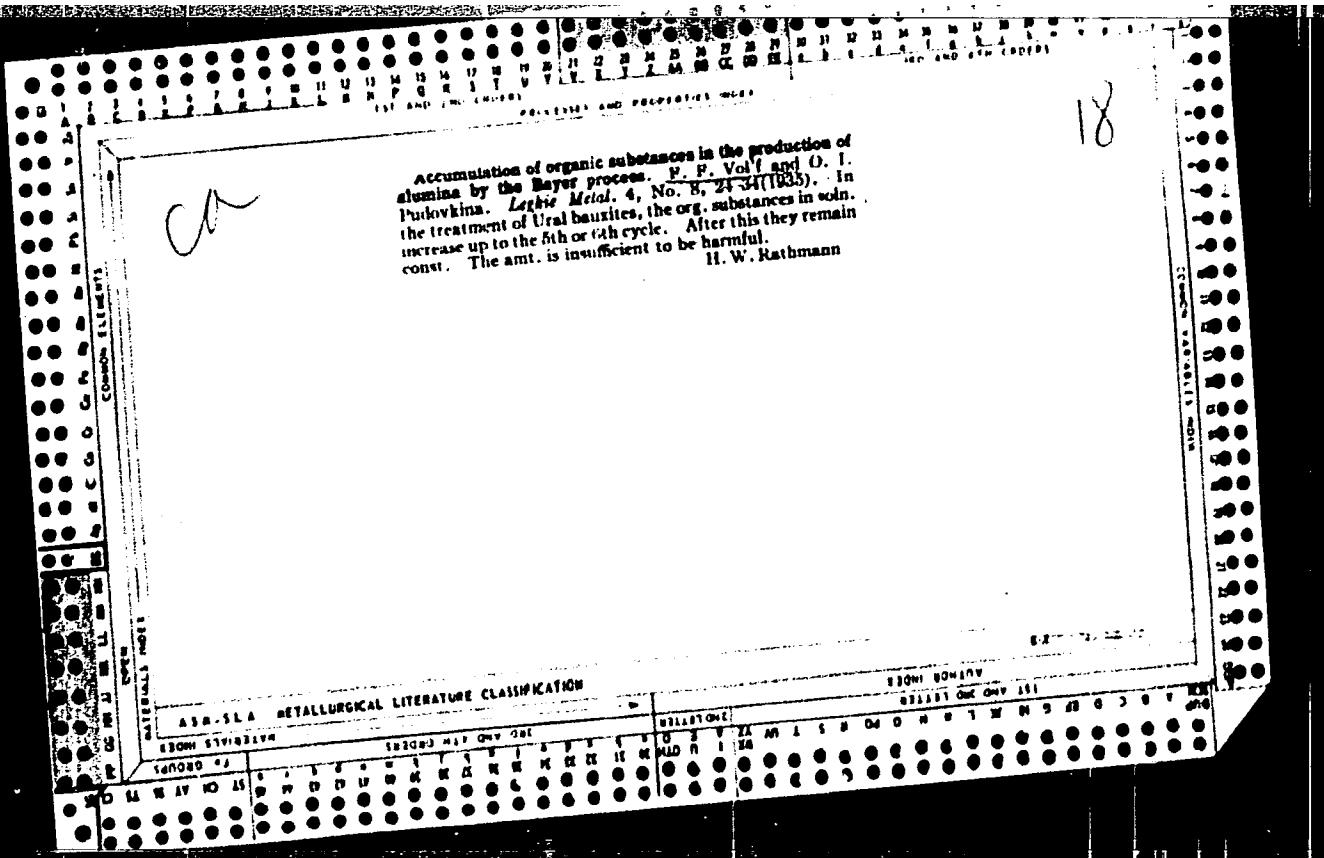
Control of wage funds by banks and the use of assets outside the
fund for the payment of wages in 1965. Prace mzda 12 no.12:532-536
D '64.

1. Central Council of Trade Unions, Prague.



Accumulation of organic substances in the production of alumina by the Bayer process. F. F. Volk and O. I. Pudovkina. *Lesn. Metal.*, 4, No. 8, 24-34 (1935). In the treatment of Ural bauxites, the org. substances in solution increase up to the 5th or 6th cycle. After this they remain const. The amt. is insufficient to be harmful.
H. W. Rathmann

18



Prepared crystalline aluminum hydroxide from chromo-aluminate solutions by precipitation with sulfuric acid. V. F. Vol'f and I. P. Mikhalkova. *J. Applied Chem. (U.S.S.R.)* 8, 1361-71 (in German 1371-2) (1935).
Solns. contg. Na₂CrO₄, NaOH and from 7 to 35 g. of Al₂O₃ per l. are best neutralized at 80°. A 16-17% H₂SO₄ soln. is added rapidly until pptn. begins, then evenly at a rate of neutralization of 0.6-1.5 g. of Na₂O per l. per hr. The ppt. of pure Al(OH)₃ is easy to filter and wash.

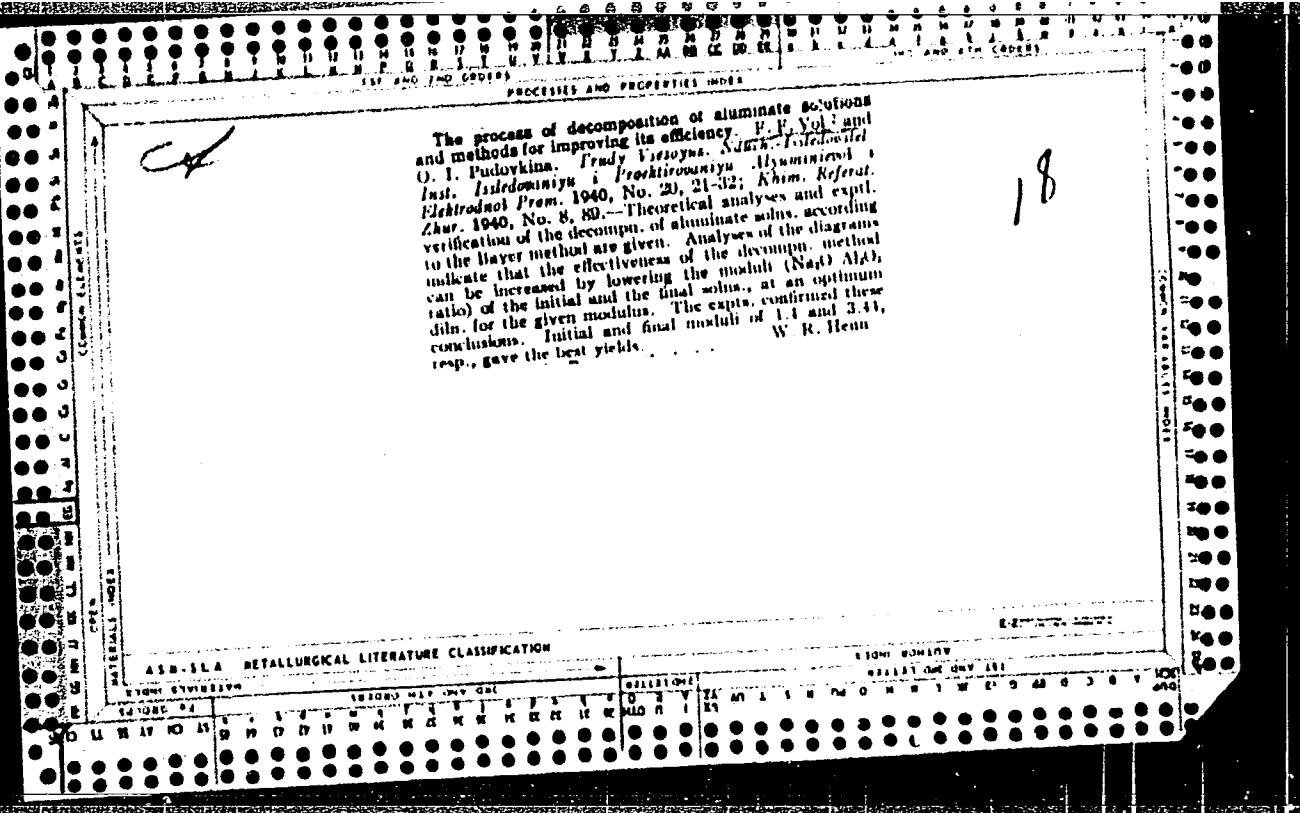
H. M. Leicester

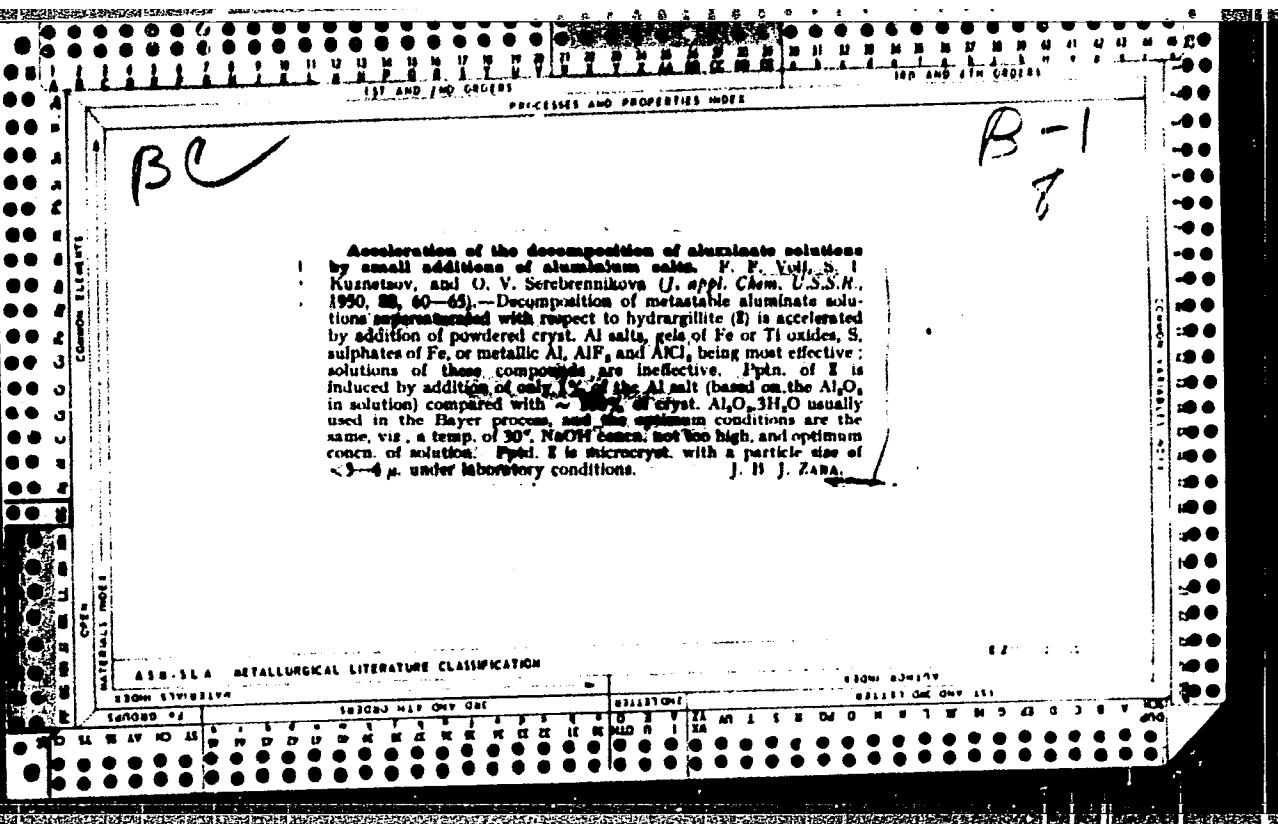
AMSLA METALLURGICAL LITERATURE CLASSIFICATION

18

CK
Obtaining crystalline aluminum hydroxide from chromo-aluminate solutions with carbon dioxide. P. V. Vol' and A. B. Morukhovets. J. Applied Chem. (U.S.S.R.) 9, 412-19 (in German 419) (1936); cf. C. A. 30, 6141. Slow addn. of gas contg. 10% CO₂ to a soln. of chromates and aluminates at 80-90° gives large, easily filtered crystals of Al(OH)₃, which contain about 0.03% Cr₂O₃. H. M. Leicester

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION





VOL'F, F. F.

Chemical Abstracts
May 25, 1954
General and Physical
Chemistry

Equilibrium diagram of the system $\text{Al}_2\text{O}_3\text{-Na}_2\text{O}\text{-H}_2\text{O}$.
P. P. Vol'f and S. I. Kurnetsov, *Zhur. Priklad. Khim.* 26,
284-302 (1953); cf. Priske and Jucaitis, *C.A.* 44, 5250.
Older data are reexamined in the light of more recent expts.
The compn. of the solid phase in equil. with solns. represented by the right branch of the isotherms above 30° are still unknown. Available data practically complete the isotherm at 30°; the left branch (AB) is in equil. with $\text{Al}_2\text{O}_3\text{.3H}_2\text{O}$ (I); the right branch is divided into (BC) in equil. with $\text{Na}_2\text{O}\text{.Al}_2\text{O}_3\text{.2.5H}_2\text{O}$ (II) and (CD) in equil. with $3\text{Na}_2\text{O}\text{.Al}_2\text{O}_3\text{.8H}_2\text{O}$ (III). The space of the rectangular coordinate, giving the isotherm as a plot of Al_2O_3 vs. Na_2O , is divided by lines drawn at 45° to the axes representing the same (wt. %) H_2O content; and by lines from the origin representing the same mole ratio $\text{Na}_2\text{O}/\text{Al}_2\text{O}_3$. From the 3 sections of the isotherm (AB), (BC), and (CD), as bases, triangles are drawn with apexes at the corresponding solid phase I, II, and III. Thus 6 fields are delineated representing areas of equil. with the 3 solid phases and pairs of I-II and II-III. I. Bencowitz

Vol'f, F.F.

ALD F - 2288

Subject : USSR/Chemistry

Card 1/1 Pub: 152 - 14/21

Authors : Vol'f, F. F., O. F. Ryazantseva and S. I. Kuznetsov

Title : Effect of sodium sulfide on the decomposition
of aluminate solutions

Periodical: Zhur. prikl. khim., 28, no.3, 319-322, 1955

Abstract : Sodium sulfide contained in aluminate solutions decreases
their rate of decomposition. Two tables, no references.

Institution: Ural Polytechnic Institute (im. Kirov)

Submitted : D 9, 1953

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1

VOLF, F. F.

Polytherms of the system alumina-sodium oxide-water.
F. F. Vol'f and S. I. Kuznetsov, J. Appl. Chem. U.S.S.R. C 1^b
28, 664-5 (1955) (Engl. translation).—See C.A. 50, 45d.
B. M. R.

(1)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1"

Vol'f, F. F.

AID P - 3490

Subject : USSR/Chemistry
Card 1/1 Pub. 152 - 5/21
Authors : Vol'f, F. F. and S. I. Kuznetsov
Title : Polytherms of the system $\text{Al}_2\text{O}_3-\text{Na}_2\text{O}-\text{H}_2\text{O}$
Periodical : Zhur. prikl. khim., 28, 6, 597-601, 1955
Abstract : The solubility of hydrargillite was determined in alkaline solutions containing 5.5, 12 and 20% Na_2O at 105, 110, and 115°C and in a solution containing 9.6% Na_2O at 45, 80, 120 and 130°C . Three diagrams, one table, 5 references, 3 Russian (1937-1950).
Institution : Ural Polytechnic Institute im. S. M. Kirov
Submitted : S 26, 1953

VOL F. 7
L 42065-65 ENT(m)/ENG(m)---RKH/RM
ACCESSION NR: AF5010917

UR/0286/65/000/007/0103/0103
2d

AUTHORS: Bakhrmann, R.; Kraus, U.; Royer, Kh.; Shvakimba, G.; Varnake, D.
B
Volond, V.; Volif, F.

TITLE: A method for obtaining anionites. Class 39, No. 169785/5

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 103

TOPIC TAGS: anionite, monomer, polymer, vinyl, copolymerization, copolymer solubility, alkyl, organic solvent, amination

ABSTRACT: This Author Certificate presents a method for obtaining anionites by copolymerization of one or several monovinyl aromatic substances with one or several bonding agents. This is followed by introducing a haloid alkyl and by amination during which copolymerization is conducted in the medium of organic solvents in which monomers are soluble, while polymers are practically insoluble. To increase the thermal stability of the strong sorbents, the solvents are added in the amounts of 0.25-10% by weight of the monomers.

ASSOCIATION: none

Card 1/2

VOL'F, F.F.[deceased]

✓ Stability of metastable aluminate solutions. Trudy Ural.politekh.
inst. no.58:5-23 '57. (MIRA 11:4)
(Alkali metal aluminates) (Solution (Chemistry))

VOL'F, F.F. [deceased]; LEVKOVICH, F.Ye.

Influence of the small additions of various substances on the solubility
of aluminum hydroxide in alkaline solvent. Trudy Ural. politekhn.
inst. no. 58:24-27 '57. (MIRA 11:4)
(Aluminum hydroxide) (Solubility)

VOL'F, G.

USSR/Physical Chemistry - Molecule. Chemical Bond.

B-4

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 18128

Author : Pctrashen', M.I., Ivanova, A.V. and Vol'f, G.

Title : Elementary Method of Accounting for the Influence of
the Field of Crystalline Lattice upon the Monoelectron S-
and P- Functions of an Ion.

Orig Pub : Vestn. Leningr. Un-ta, 1956, No 10, 29-38

Abstract : The influence of the field of cub. lattice of an ion
crystal upon monoelectron functions of a separated
"central" ion is studied, taking into consideration only
electrostatic interaction. The potential of the field
is resolved into cub. harmonics. Coefficients in this
resolution are determined in the case of point lattice.
Examination shows that under the influence of the field
of the lattice the electron bond of the positive ion
with the nucleus is weakened and the bond of the negative
ion becomes stronger. An approximate method is given for

Card 1/2

- 13 -

USSR/Physical Chemistry - Molecule. Chemical Bond.

B-4

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 18128

determination of the radial part of monoelectron function of central ion; the method is based on taking the field of the lattice as approximately equal to zero inside the ion and equal to a certain constant value, depending on the constant functions $f_{2p}(r)$ for F⁻ and $f_{1s}(r)$ for Li were built in the field of the crystal LiF. Computed with their help values of polarizability and diamagnetic susceptibility are in good agreement with the observed values.

Card 2/2

- 14 -

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1

VOL F G

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860420018-1"

VOL'F, G.

PETRASHEN', M.I.; IVANOVA, A.V.: VOL'F, G.

Elementary method for calculating the effect of the crystal-lattice field on ionic single-electron S- and P-functions. Vest.Len.un.11 no.10:29-38 '56.
(MLRA 9:9)
(Crystallochemistry) (Wave mechanics)

CZECHOSLOVAKIA / Chemical Technology. Food Industry. H

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 75481.

Author : Volf, Glavachova, Prskavtsova, Mareshova.

Inst : Not given.

Title : A Change in Food Products Caused by Ionization.

Orig Pub: Zh. gigieny, epidemiol., microbiol., i immunol.
(Chekhosl.), 1958, II; No 2, 137-142.

Abstract: The Effect of X-rays upon microflora, ascorbic acid content, pepsin and diatase was studied. It was established that already at relatively small doses the content of ascorbic acid and the activity of ferment is decreased considerably in certain food products.

Card 1/1

VOL'F, F.M.

Intensity of harmonic and combination components in nonlinear
distortions of compound vibrations. Akust. zhur. 1 no.4:321-
325 O-D '55. (MIRA 9:2)

1.Kiyevskiy ordena Lenina politekhnicheskiy institut.
(Electroacoustics)

VOL'F, I.

Calculation of the composition of concrete based on the measurable consumption of water and cement. Tr. from the Russian. p. 96.
INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha
Vol. 2, no. 3, Mar. 1954.

SOURCE: EEAL LC Vol. 5, No. 10 Oct. 1956

VOL'F, I.

First day in Jakarta. Vokrug sveta no.1:13-15 Ja'55. (MIRA B:2)
(Jakarta, Indonesia--Description)

L 16652-65 FWT(1)/EPF(c)/EPA(w)-2/EPC(t)/T/EWA(m)-2 Pr-L/Pab-10 IJP(c)/
ESD(gs)/ESD(t)/AEDC(a)/AEDC(b)/SSD(a)/SSD(AFWL/AS(mp)-2 KW
ACCESSION NR: AP4045293 S/0048/64/028/009/14:3/1426

AUTHOR: Vol'f, Isaakim

TITLE: On some technological problems of a carbon-ion source

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 28, no. 9, 1964, 1423-1426

TOPIC TAGS: ion source, carbon ion, ionized carbon, ionization, carbon

ABSTRACT: An apparatus is described which, according to the author's claim, can produce a continuous beam of carbon ions of about 40 siamp for periods of one to two hours. The instrument consists of a ring-shaped ion source facing a graphite rod which serves as anode. When bombarded in high vacuum with an electron beam, the front surface of the rod is heated to 2900K. This causes the emission of a molecular carbon beam. On their path towards the graphite rod, the electrons cross this molecular carbon beam and produce carbon ions by colliding. Thus, the same electron beam performs two functions: it makes the graphite evaporate and ionizes the gas. Because the ring-shaped ion emitter is negative in relation to the graphite rod, the positive carbon ions are accelerated and extracted from the ionization zone. The authors state that in their device each thousandth electron creates an ion and almost every thousandth evaporated carbon atom is ionized. Orig. art. has:

4 figures.

Card 1/2

L 16651-65

ACCESSION NR: AP5000080

g is gravitational acceleration, θ is the angle between the flight direction and the gravitational field, and t is the flight time on the active trajectory. The electromagnetic moment is transduced into an electric current which is amplified in the amplifier section. Two electrodes, set in a bath of sodium acetate, sodium chloride, and acetic acid, serve as the principal components of the integrator unit. A layer of silver chloride on one electrode is transferred to the other by electrolysis, varying in intensity with time and with the transmitted current i . The quantity of silver chloride transferred is given by

$$A = q \int_0^t idt = K(v + \frac{g}{\theta} \sin \theta dt), \text{ where } q \text{ is the electrochemical equivalent and}$$

K is a proportionality constant relating the pendulum section with the electrochemical integrator. The entire system is shown schematically in a diagram. Orig. art. has: 16 equations and 3 figures.

ASSOCIATION: none

ENCL: 00

SUBMITTED: 00

SUB CODE: NG

NO REF Sov: 004

OTHER: 000

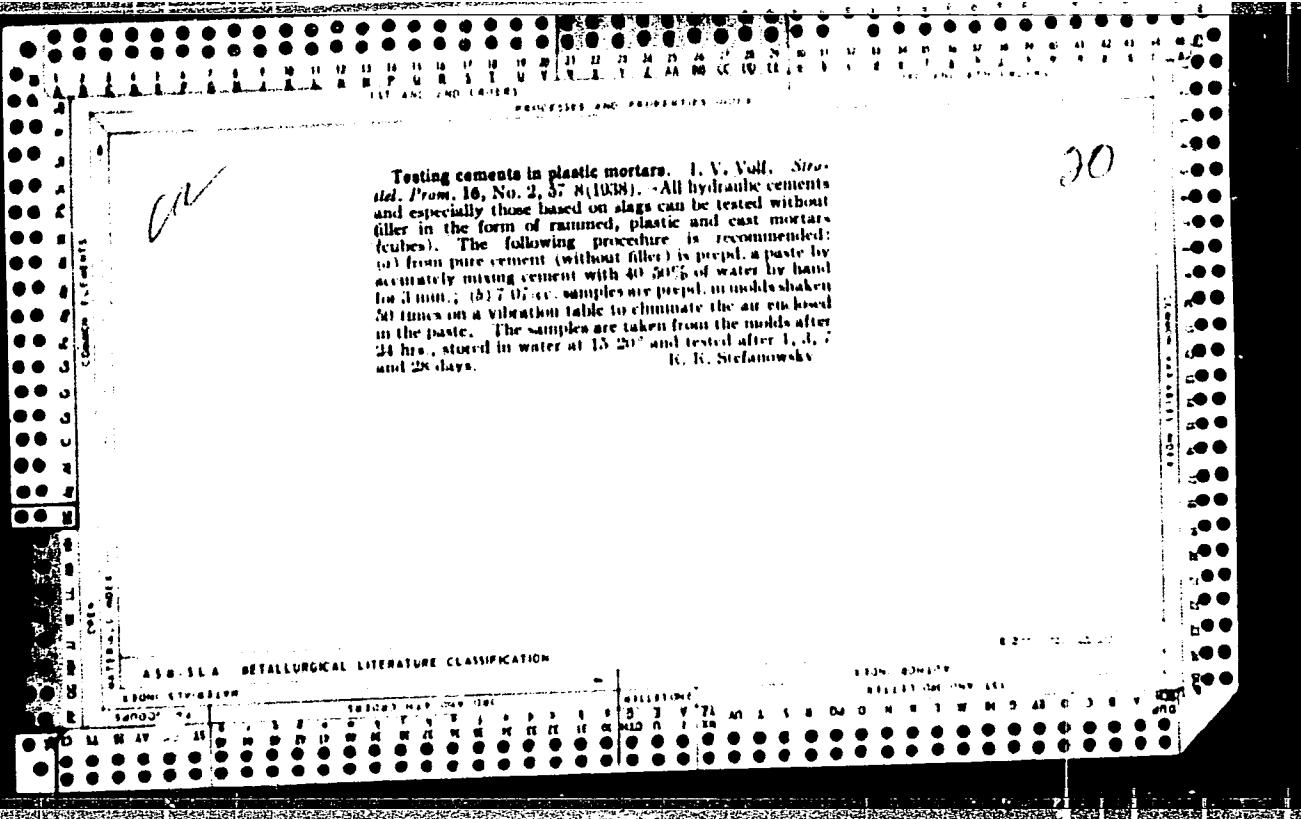
Card 2/2

VOL'F, Iozef

GEYNY, Ladislav [Hejny, Ladislav]; TEGNIK, Vladimir [Tehnik, Vladimir].
inghener; VOL'F, Iozef [Wolf, Josef], inzhener.

Technical progress in track maintenance on Czechoslovak railroads.
Zhel. dor. transp. 39 no. 5:26-32 My '57. (MLRA 10:6)

1. Nachal'nik TSentral'nogo upravleniya putevogo khozyaystva i
zdaniy (for Geyny). 2. Glavnnyy inzhener upravleniya putevogo
khozyaystva i zdaniy (for Tegnik). 3. Starshiy revizor upravleniya
putevogo khozyaystva i zdaniy (for Vol'f).
(Czechoslovakia--Railroads--Track)



VOLF, I. V.

3RD AND 4TH ORDERS

1ST AND 2ND ORDERS

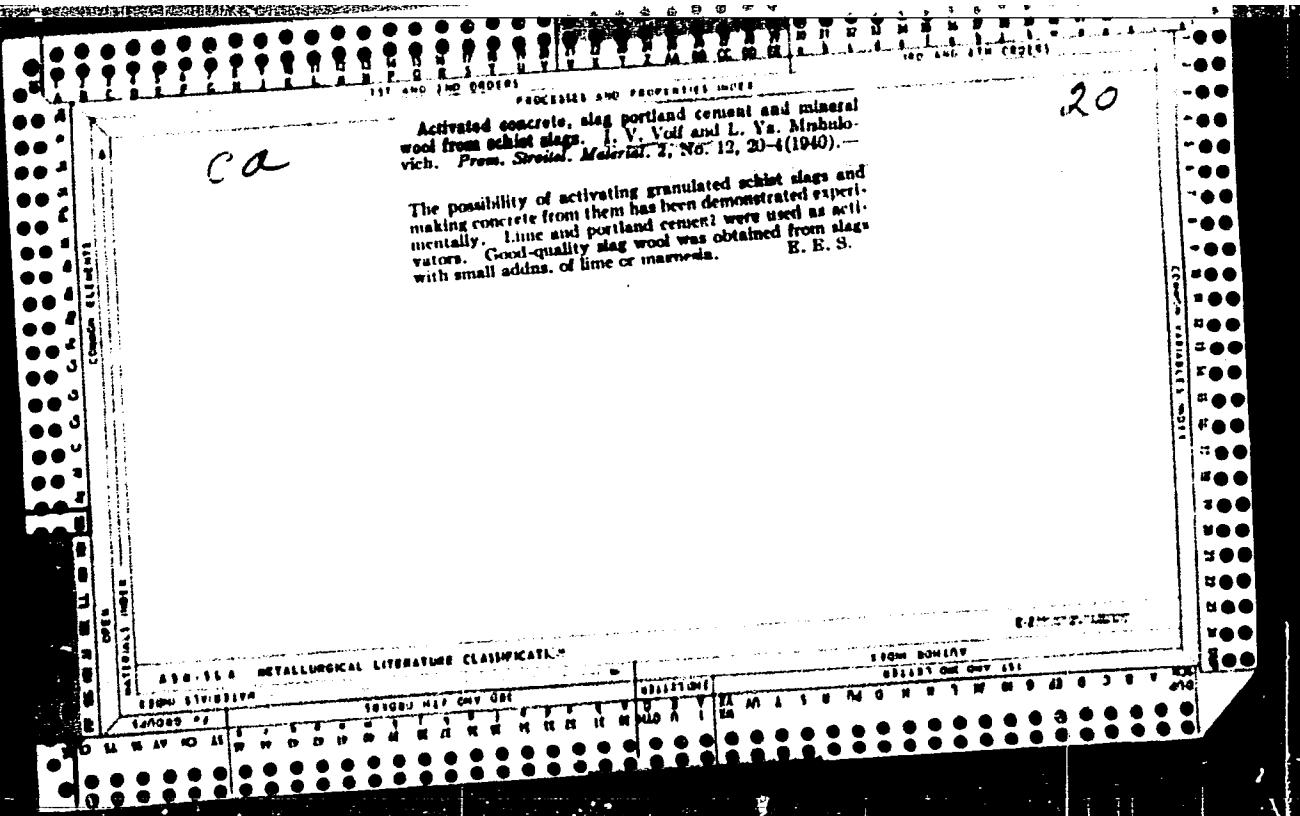
PROCESSES AND PROPERTIES INDEX

Ca

20

Activated concrete, slag portland cement and mineral
wool from electric slags. I. V. Volf and L. Ya. Michelo-
vich. From: Strilec. Material, No. 12, 20-4 (1949).

The possibility of activating granulated electric slags and
making concrete from them has been demonstrated experi-
mentally. Lime and portland cement were used as acti-
vators. Good quality slag wool was obtained from slags
with small addns. of lime or magnesia. B. E. S.



1. VOL'F, I.V.
2. USSR (600)
4. Concrete - Tables, Calculations, Etc.
7. Computation of the consistency of concrete based on specific consumption of water and cement, Stroi.prom. 31 no. 4, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncr.

VOL'F, I.V., kandidat tekhnicheskikh nauk; TSELUYKO, M.K.; PUKHAL'SKIY,
G.V., kandidat tekhnicheskikh nauk; KHOKHOLEV, K.I.; LITVINOV,
O.O., redaktor; YANOVSKIY, V., redaktor; IOAKIMIS A., tekhnicheskiy redaktor.

[Experience in using blast furnace slag in construction] Opyt
primeneniya domennykh otval'nykh shlakov v stroitel'stve. Pod red.
O.O. Litvinova. Kiev, Gos.izd-vo lit-ry po stroyit. i arkhitekture
(MIRA 9:6)
USSR, 1956. 109 p.

1. Direktor Zhdanovskogo filiala YUZHNII (for Tseluyko). 2. Direktor
Dnepropetrovskogo filiala YUZHNII (for Khokhlev). 3. Chlen-korres-
pondent Akademii arkhitektury USSR (for Litvinov).
(Slag)

VOL'F, I. V.

Defended his Dissertation for Candidate of Chemical Sciences, Leningrad State University, Leningrad, 1953

Dissertation: "Preparation of Ion-Exchange Adsorbents From Humin Substances and Investigation of Their Exchange Capacities"

SO: Referativnyy Zhurnal Khimiya, No. 1, Oct. 1953 (W/29955, 26 Apr 54)

Vol. I. 6

JPS: L-974-N
CGO: 1743-8

THEORY AND PRACTICE OF THE APPLICATION OF ION-

EXCHANGE MATERIALS

K. V. Chumakov

Teoriya i Praktika Primeneniya
Ionobmennikh Materialov, Moscow,
1955, pp 1-164.

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Chernobor, S. M., Zel'des, V. I., Gorskik, Ye. M. Nickel Ion Exchange by Cation Exchangers	150

VOL'F, I. V. and GRIGOROV, O. N.

"The Results of the Investigation of Ion-Exchange Adsorbents Derived from Humins,"
an article included in the book "The Theory and practice of the Application of Ion-
/Exchange Agents," edited by K. V. Chumkov and published by the As USSR, 1955, 164 pp.

VOL'F, I.V., (Novosibirsk-Leningrad); MOISEYEV, A.S.(Novosibirsk-Leningrad);
KORYSTIN, P.V., (Novosibirsk-Leningrad); NOVIK, I.V.(Novosibirsk-
Leningrad)

Distilling water with a portable ionite filter. Vod. i san.tekh.
no.12:8-10 D '56. (MIRA 10:3)
(Water--Purification) (Ion exchange)

VOL'F, I.V., MOISEYEV, A.S., KORYSTIN, P.V., NOVIK, I.V.

"Purification of Water in a Portable Ionite Filter," by I. V.
Vol'f, A. S. Moiseyev, P. V. Korystin, and I. V. Novik, Vodos-
nabzheniye i Sanitarnaya Tekhnika, No 12, Dec 56, pp 8-10

The article gives a brief history of the development of portable ionite filters for purification (elimination of salts and impurities) from water to render it potable, conducted by the All-Union Scientific Research Institute for Hydraulic Engineering and Sanitary Engineering Works, from 1950 to present.

The article also describes in detail the construction and characteristics of a portable ionite water filter developed in 1955 by the above institute in conjunction with the Novosibirsk Scientific Research Sanitary Institute, the filter being designed for the use of small groups under field conditions in areas of high mineral content.

The purified water output of the filter on a single charge of ionites is 250 liters when the salt content of the original water is less than 3 g/l. When the original salt concentration is 5-6 g/l, the fresh water output is reduced to 100-120 l.

The filtering unit itself is cylindrical in shape, the dimensions being one meter x 200 mm.

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